

In the Claims:

Please cancel claims 1-3 and 7-16, without prejudice or disclaimer, as indicated in the following listing of claims, which replaces all prior versions.

1. - 3. (Cancelled)

4. (Previously presented) In a photo lithography process on a photo resist coated substrate, a method for determining the effect of flare on line shortening, the method comprising:

in a first exposure and at a first die position on the substrate, printing a dark-field mask including a flare pattern corresponding to one corner of the dark-field mask, a correction box opening, and a focus box pattern on the substrate;

in a second exposure at the first die position, printing a clear-field mask including another flare pattern corresponding to another corner of the clear-field mask that is located opposite the one corner;

at a second die position on the substrate, printing a composite mask pattern based on features of the dark-field mask and the clear-field mask;

developing the printed patterns and obtaining measurements from the patterns in both X and Y directions, the measurements including

the dimensions of the flare box pattern of features printed with the dark-field mask and features printed with the clear-field mask,

the dimensions of the correction box features printed during the first exposure and features printed during the second exposure,

the dimensions of the focus box pattern printed during the stepping to the first die position, and

the dimensions of the focus box pattern printed at the second die position;
and

determining the effect of flare as a function of the measured differences between a left-leg and right-leg of a given printed feature for the X-direction, and as a function of

the differences between a top-leg and bottom-leg of a given printed feature for the Y-direction.

5.(Original) The method of claim 4, wherein the effect of flare is defined by the following equation, $ls_n^{Flare} = r_n^{If-df} - r_n^{1st-2nd\ mask} - r_n^{Multiple-Single\ Exposure}$ where r_n^{If-df} , $r_n^{1st-2nd\ mask}$ and $r_n^{Multiple-Single\ Exposure}$ are the measured misalignments in a given direction **n** for the light field/dark field structures (A), the standard box in box (B) that measures the alignment between the two exposures and the measured difference between the focus box structure (C) exposed twice versus a single time.

6. (Original) The method of claim 5, wherein **n** includes the X-direction and the Y-direction.

7.- 16. (Cancelled)